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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,282	01/14/2004	Vincent Valentino Di Luoffo	AUS920030858US1	6334
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IBM CORP (AP) C/O AMY PATTILLO P. O. BOX 161327 AUSTIN, TX 78716			EXAMINER ZHE, MENG YAO	
			ART UNIT 2195	PAPER NUMBER
			MAIL DATE 12/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/757,282

Applicant(s)

LUOFFO ET AL.

Examiner

MengYao Zhe

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/25/06 7/5/05 1/14/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-34 are presented for examination.

### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12-21 are rejected under 35 U.S.C. 101 because it recites a "system"; however, it appears that the system would reasonably be interpreted by one of ordinary skill in the art as software, per se, failing to be tangibly embodied or include any recited hardware as part of the system.

3. Claims 22-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer readable medium is define as a "acoustic or light wave". In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, 6-7, 11-13, 17, 21-23, 27, 29, are rejected under 35 U.S.C. 102(e) as being anticipated by Mei et al., Patent No. 6,816,907 (hereafter Mei).

6. As per claims 1, 12, 22, Mei teaches a method for maintaining application operations within a suboptimal grid environment, comprising:

submitting an application to at least one resource node from among a plurality of resource nodes within a grid environment (Column 5, lines 15-18, lines 23-30);

monitoring a performance status of said at least one resource node (Column 5, lines 34-38);

comparing said performance status with an operational requirement specified for when said application is operating at said at least one resource node (Column 6, lines 8-21);

responsive to said performance status not meeting said operational requirement, adjusting use by said application of said at least one resource node, such that said application continues to operate when suboptimal conditions arise in a grid environment (Column 6, lines 23-25; Column 7, lines 10-20, lines 42-53).

7. As per claims 2, 13, 23, 29, Mei teaches within a suboptimal grid environment, wherein adjusting use by said application of said at least one resource node further comprises:

locating at least one other resource node from among said plurality of resource nodes within said grid environment that meets said operational requirement specified for said application when said application is operating at said at least one other resource node; relocating said application to said at least one other resource node within said grid environment (Column 7, lines 15-20, lines 48-52).

8. As per claims 6, Mei teaches maintaining application operations within a suboptimal grid environment, wherein said at least one resource node operates on at

least one platform for which said operational requirement is specified (Column 5, lines 1-8).

9. As per claims 7, 17, 27, Mei teaches maintaining application operations within a suboptimal grid environment, further comprising: responsive to receiving a job request for said application, accessing a profile for said application, wherein said profile specifies said operational requirement for said application for a plurality of platforms on which said plurality of resources nodes are distributed (Column 5, lines 44-50; Column 6, lines 7-21, lines 33-46).

10. As per claims 11, 21, Mei teaches wherein said application is one from among an stand-alone application, a service, an agent, and a controller operating within said grid environment (Column 4, lines 29-45, lines 48-60).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3-5, 8-10, 14-16, 18-20, 24-26, 28, 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mei et al., Patent No. 6,816,907 (hereafter Mei) in view of Sankaranaryan et al, Patent No. 6,799,208 (hereafter Sankaranaryan).

13. As per claims 3, 14, 24, 33, Mei does not specifically teach wherein adjusting use by said application of said at least one resource node further comprises: identifying a first module of said application to shutdown; and sending a message to said at least one resource node to shutdown said first module.

However, Sanaranaryan teaches wherein adjusting use by said application of said at least one resource node further comprises: identifying a first module of said application to shutdown; and sending a message to said at least one resource node to shutdown said first module for the purpose of shutting down low priority modules so that higher priority modules may have sufficient resources to operate (Column 10, lines 58-65; Column 14, lines 32-41; Column 15, lines 25-42; Column 16, lines 39-52).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Mei with wherein adjusting use by said application of said at least one resource node further comprises: identifying a first module of said application to shutdown; and sending a message to said at least one resource node to shutdown said first module, as taught by Sanaranaryan, because it

allows for shutting down low priority modules so that higher priority modules may have sufficient resources to operate.

14. As per claims 4, 9, 15, 19, 25, 28, Sanaranaryan teaches wherein identifying a first module of said application to shutdown further comprises: searching an application profile for said application to identify said first module, wherein said application profile defines said first module and prioritizes said first module (Column 14, lines 10-30; Fig 5).

15. As per claims 5, 16, 26, 34, Sanaranaryan does not specifically teach determining whether said application can continue to operate without said first module; and responsive to a determination that said application cannot continue to operate without said first module, returning an error message for said application to a client system requesting said application; and responsive to a determination that said application can continue to operate without said first module, determining whether a next module should be identified to be shutdown if said performance status does not meet said operational requirement after shutting down said first module.

However, it would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Sanaranaryan with determining whether said application can continue to operate without said first module;



and responsive to a determination that said application cannot continue to operate without said first module, returning an error message for said application to a client system requesting said application; and responsive to a determination that said application can continue to operate without said first module, determining whether a next module should be identified to be shutdown if said performance status does not meet said operational requirement after shutting down said first module, since as a service provider, it is generally not acceptable to shut down the entire application ran by the consumer.

16. As per claims 8, 18, 32, Sanaranaryan does not specifically teach wherein said profile for said application further comprises an XML expression of a plurality of attributes of said application and a performance range for said application when operating on each of said plurality of platforms.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Sanaranaryan with wherein said profile for said application further comprises an XML expression of a plurality of attributes of said application and a performance range for said application when operating on each of said plurality of platforms since XML is well known language, and any file or data, including a profile, may be expressed in XML to contain different attributes and performance ranges.

17. As per claims 10, 20, Sanaranaryan does not specifically teach wherein said profile for said application further comprises an XML expression of a plurality of attributes of said application and a performance range for said application to achieve when shutting down said at least module.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Sanaranaryan with wherein said profile for said application further comprises an XML expression of a plurality of attributes of said application and a performance range for said application to achieve when shutting down said at least module since XML is well known language, and any file or data, including a profile, may be expressed in XML to contain different attributes and performance ranges.

18. As per claims 30 and 31, Sanaranaryan does not specifically teach wherein first platform and second platform are the same type or different type of platforms.

However, it would have been obvious to one having ordinary skill in the art tat the time of the applicant's invention to modify the teachings of Sanaranaryan with wherein first platform and second platform are the same type or different type of platforms, since there are different types of platform out there to choose from, and whether they are the same or different platform does not contribute to the novelty of the current invention.

***Conclusion***

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MengYao Zhe whose telephone number is 571-272-6946. The examiner can normally be reached on Monday Through Friday, 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached at 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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